

SUMMARY OF CONFIRMED INFECTIONS

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The September 2011 issue presents the laboratory diagnosis of some of the infectious diseases and reference microbiology, virology and molecular tests done in the laboratory and new cases of syphilis in the City of Milwaukee during August 2011.

Legionnaires Disease

Patient		Test		
Age	Sex	Urine Antigen	Culture	DFA
44	M	-	+	ND

ND = Not done

Syphilis

Test	Total	Test	Total
RPR Reactive	0	TPPA Reactive	12
VDRL Reactive	24	Darkfield Positive	0

New Cases of Syphilis

Stage	Number of Cases	
	August 2011	August 2010
Primary syphilis	0	0
Secondary syphilis	2	0
Early latent	1	0
Late latent	0	0
Total	3	0

Source: Wisconsin Division of Health

Gonorrhea Antimicrobial Susceptibility Testing

Number Tested	Decreased Susceptible (DS) / Resistant (R) Antibiotics			
	Ciprofloxacin	Cefixime	Ceftriaxone	Azithromycin
28	1 (R)	0	0	0

Isolates Other Than *N. gonorrhoeae*

Organism	Site	Number Isolates	Organism	Site	Number Isolates
<i>Ureaplasma urealyticum</i>	Genital	9	<i>Mycoplasma hominis</i>	Genital	6

Enteric Parasites Identified

Age	Sex	Parasite
23	M	<i>Blastocystis hominis</i>
66	M	<i>Blastocystis hominis</i>
36	M	<i>Blastocystis hominis</i>
26	F	<i>Blastocystis hominis</i>
35	M	<i>Blastocystis hominis</i>
4	M	<i>Blastocystis hominis</i>
34m	M	<i>Blastocystis hominis</i>
		<i>Entamoeba coli</i>
		<i>Giardia lamblia</i>
14	M	<i>Blastocystis hominis</i>
		<i>Entamoeba histolytica/Entamoeba dispar</i>
12	F	<i>Blastocystis hominis</i>
		<i>Entamoeba histolytica/Entamoeba dispar</i>
		<i>Endolimax nana</i>
8	F	<i>Blastocystis hominis</i>
		<i>Giardia lamblia</i>
25	M	<i>Endolimax nana</i>
9	M	<i>Endolimax nana</i>
20	M	<i>Endolimax nana</i>
		<i>Entamoeba species</i>
32	M	<i>Entamoeba coli</i>
30	F	<i>Entamoeba coli</i>
16	F	<i>Entamoeba coli</i>
14	F	<i>Entamoeba coli</i>
		<i>Giardia lamblia</i>
10	F	<i>Entamoeba coli</i>
		<i>Giardia lamblia</i>
9	M	<i>Entamoeba coli</i>
		<i>Giardia lamblia</i>
25	F	<i>Entamoeba histolytica/Entamoeba dispar</i>
		<i>Iodamoeba buetschlii</i>
4	M	<i>Giardia lamblia</i>
4	M	<i>Giardia lamblia</i>

9	F	<i>Giardia lamblia</i>
14	F	<i>Giardia lamblia</i>
6	F	<i>Giardia lamblia</i>
42	M	<i>Giardia lamblia</i>
6	M	<i>Giardia lamblia</i>
26	M	<i>Entamoeba histolytica/Entamoeba dispar</i>
		<i>Endolimax nana</i>
		<i>Giardia lamblia</i>
4	M	<i>Entamoeba coli</i>
		<i>Entamoeba histolytica/Entamoeba dispar</i>
		<i>Giardia lamblia</i>
7	F	<i>Giardia lamblia</i>
		<i>Entamoeba histolytica/Entamoeba dispar</i>
7	F	<i>Giardia lamblia</i>
		<i>Hymenolepis nana</i>
42	F	<i>Heterophyes heterophyes</i>
25	F	<i>Heterophyes heterophyes</i>
30	F	<i>Hookworm</i>
38	F	<i>Hookworm</i>
74	F	<i>Taenia species</i>

Mycobacterial Infections

Age	Sex	Test Results				Identification
		Sputum Smear	Culture	DNA Probe	PCR	
39	M	-	+	+	-	<i>M. avium</i> complex
56	M	-	+	+	-	<i>M. avium</i> complex
78	M	-	+	+	ND	<i>M. avium</i> complex
			+	+	ND	<i>M. tuberculosis</i>

ND = Not Done

Reference Cultures

Age	Sex	Source	Identification
62	M	Blood	<i>Bacillus species</i> , NOT <i>Bacillus anthracis</i>
19	M	Penile pustule	<i>Neisseria gonorrhoeae</i>
63	M	Elbow	<i>Nocardia asteroides</i> complex
22	M	Stool	<i>Salmonella</i> Bareilly
64	M	Stool	<i>Salmonella</i> Infantis
64	M	Whole Blood	<i>Salmonella</i> Infantis
24	M	Stool	<i>Salmonella</i> Infantis

63	F	Stool	<i>Salmonella</i> Monophasic
64	M	Stool	<i>Salmonella</i> Montevideo
9m	F	Stool	<i>Salmonella</i> Typhimurium

Virus Isolations from Clinical Specimens

Age	Sex	Source	Symptoms	Agent
5 mo	M	NP, small intestine, L lung	Autopsy	Adenovirus

Herpes Simplex Virus Isolations

Agent	Number of Isolates
Herpes Simplex type 1	2
Herpes Simplex type 2	10

Molecular Amplification and PCR

Agent	Method	Tested	Positive	% Positive
<i>Bordetella pertussis/parapertussis</i>	RT-PCR	2	0	0%
Influenza virus	RT-PCR	6	0	0%

Chlamydia (CT) and Gonorrhea (GC) Molecular Testing

Source	No. Tested	Positive	% Positive
Urine	594	95 (CT)	16.0%
		41 (GC)	6.9%
Throat swabs	247	6 (CT)	2.4%
		10 (GC)	4.0%
Rectal swabs	27	3 (CT)	11.1%
		3 (GC)	11.1%
Genital swabs	4	1 (CT)	25.0%
		0 (GC)	0%

DNA Sequencing: The MHD laboratory uses 16S rRNA and the D2 region of the 26S rRNA genes for DNA sequence-based microbial identification of selective reference bacteria and fungal isolates

Reference Microbe	Age	Sex	Source	Target gene	Final Identification
Bacteria	48	M	BAL	16S rRNA	<i>Bacillus</i> species
Bacteria	51	M	Blood	16S rRNA	<i>Bacillus cereus</i>
Bacteria	44	M	Lung	16S rRNA	<i>Legionella anisa</i>
Bacteria	31	M	Sputum	16S rRNA	<i>Legionella pneumophila</i>
Bacteria	12	F	Lung	16S rRNA	<i>Pseudomonas extremorientalis</i>